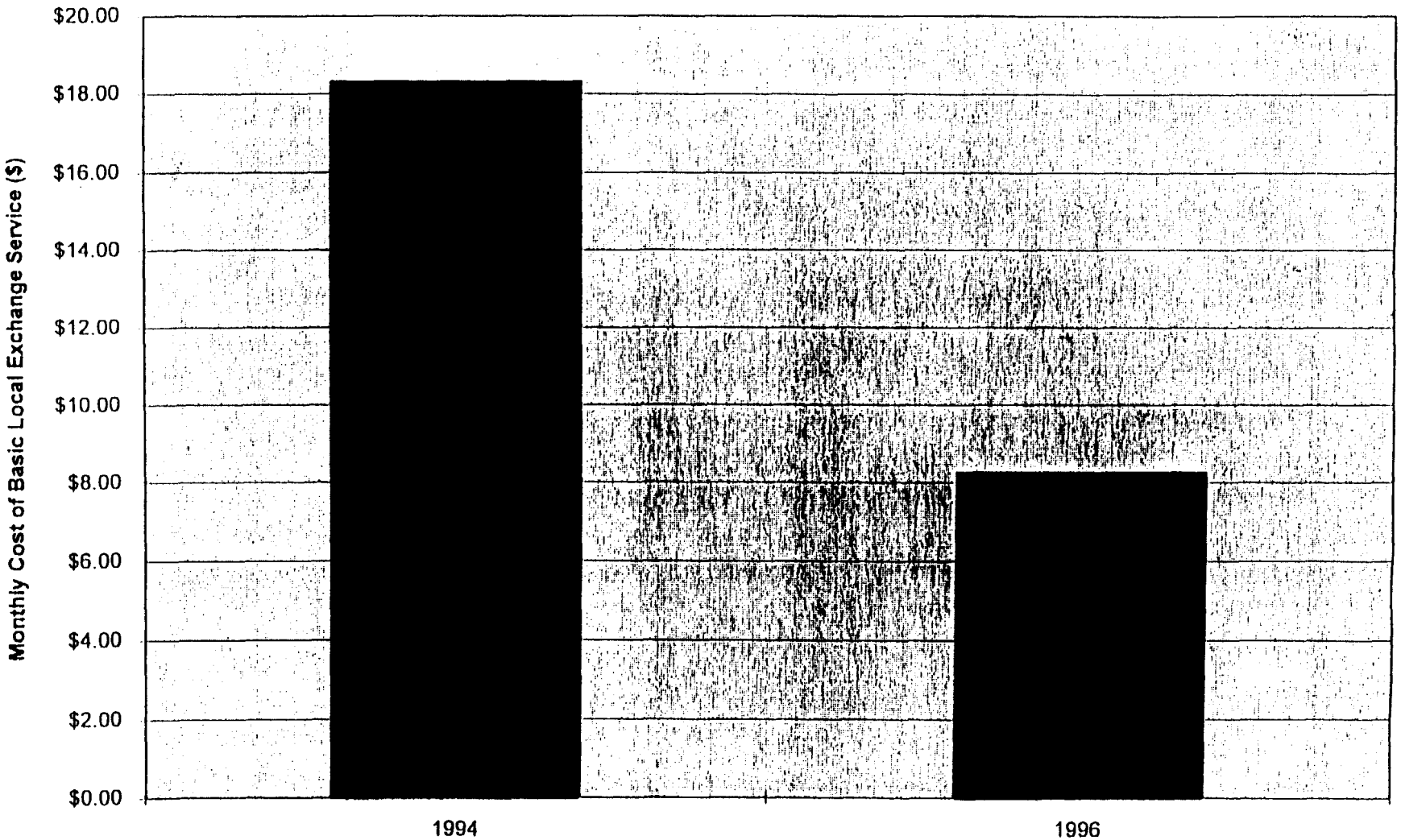
The Hatfield Model is Flawed and Should Not Be Used

- Endorsed by AT&T and MCI as a pricing tool
- The results have fluctuated greatly over time
- The model pulls in part from the flawed Benchmark Cost Model
- Minimal consideration of joint and common costs
- Uses prescribed depreciation lives rather than economic lives
- Uses unrealistic cost of money
- Uses overly high utilization factors
- Underestimates economic cost of service, especially in urban areas (e.g.- Fla. and Ga.)

COMPARISON OF HATFIELD STUDY RESULTS: 1994 TO 1996

Density Zone: Greater than 5,000 people per square km



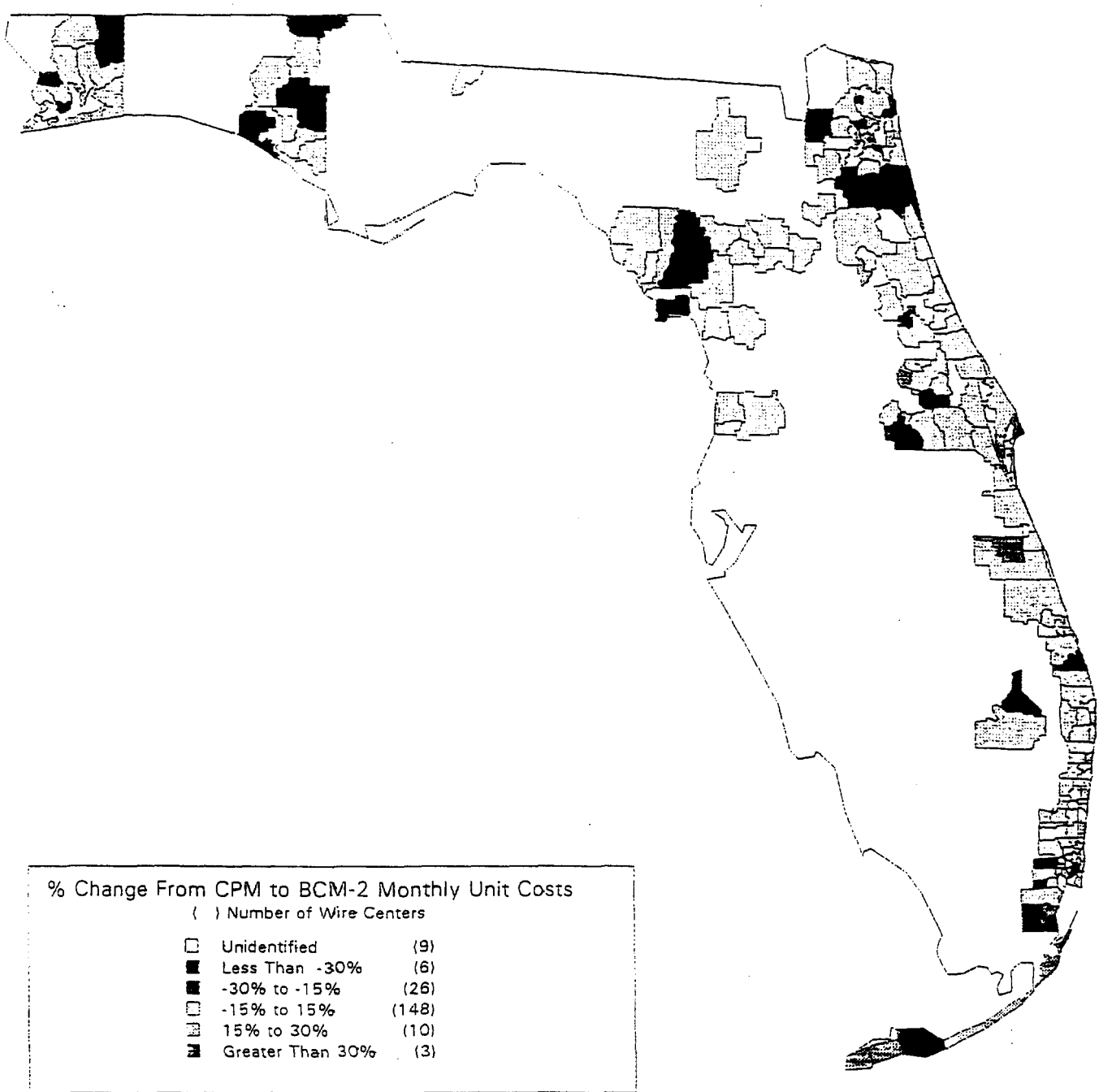
HATCOM.XLS

The BCM 2 and the CPM appear to have some Potential for Use in Universal Service Support Calculations

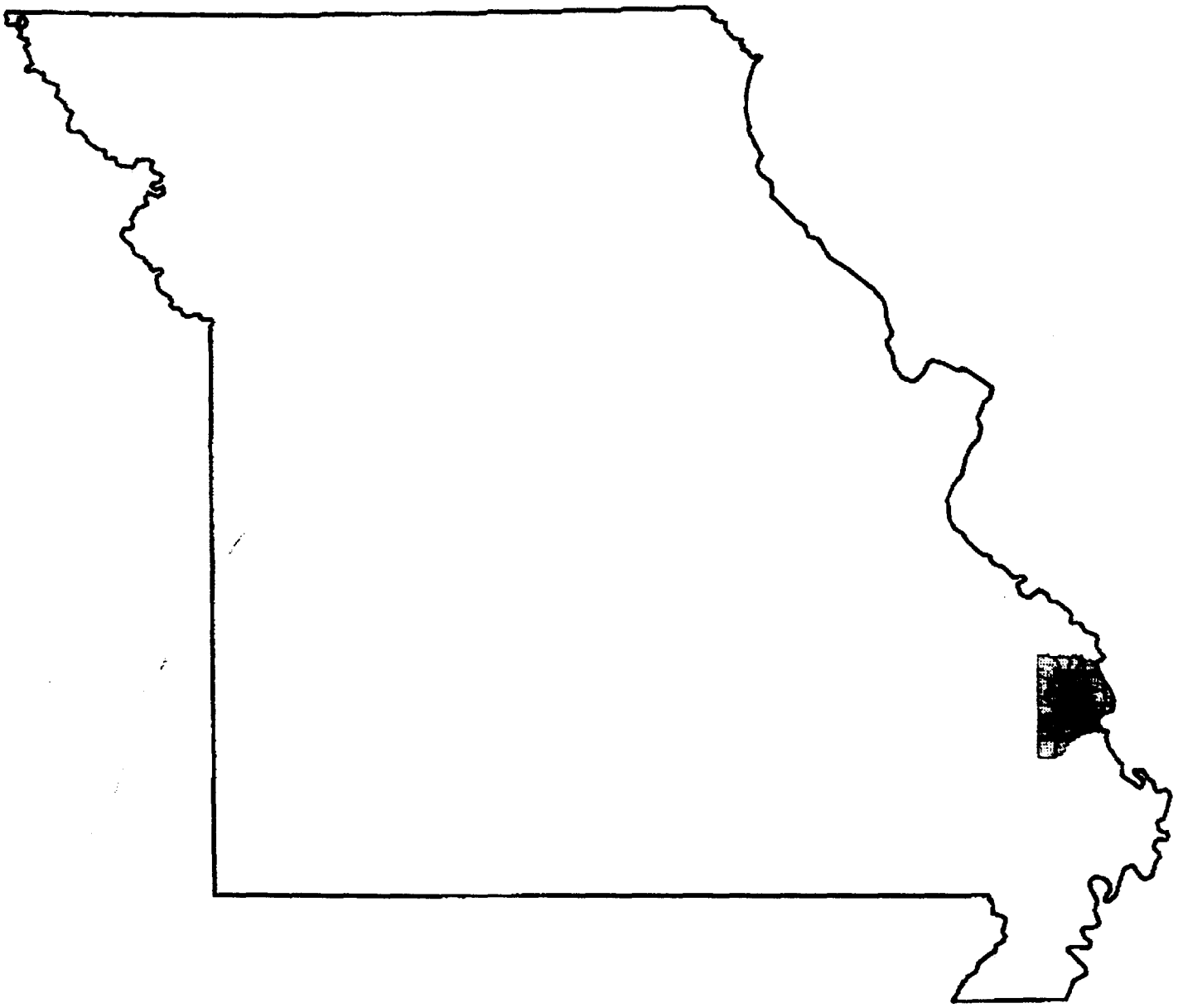
- Both are based on sound engineering criteria
- Both consider some expenses on a per line basis and other expense on an investment basis
- Both use reasonable fill factors
- Both account for a reasonable share of joint and common costs
- Both allow some state specific inputs
- Both include drop wire and terminal investment

Comparison of CPM & BCM-2

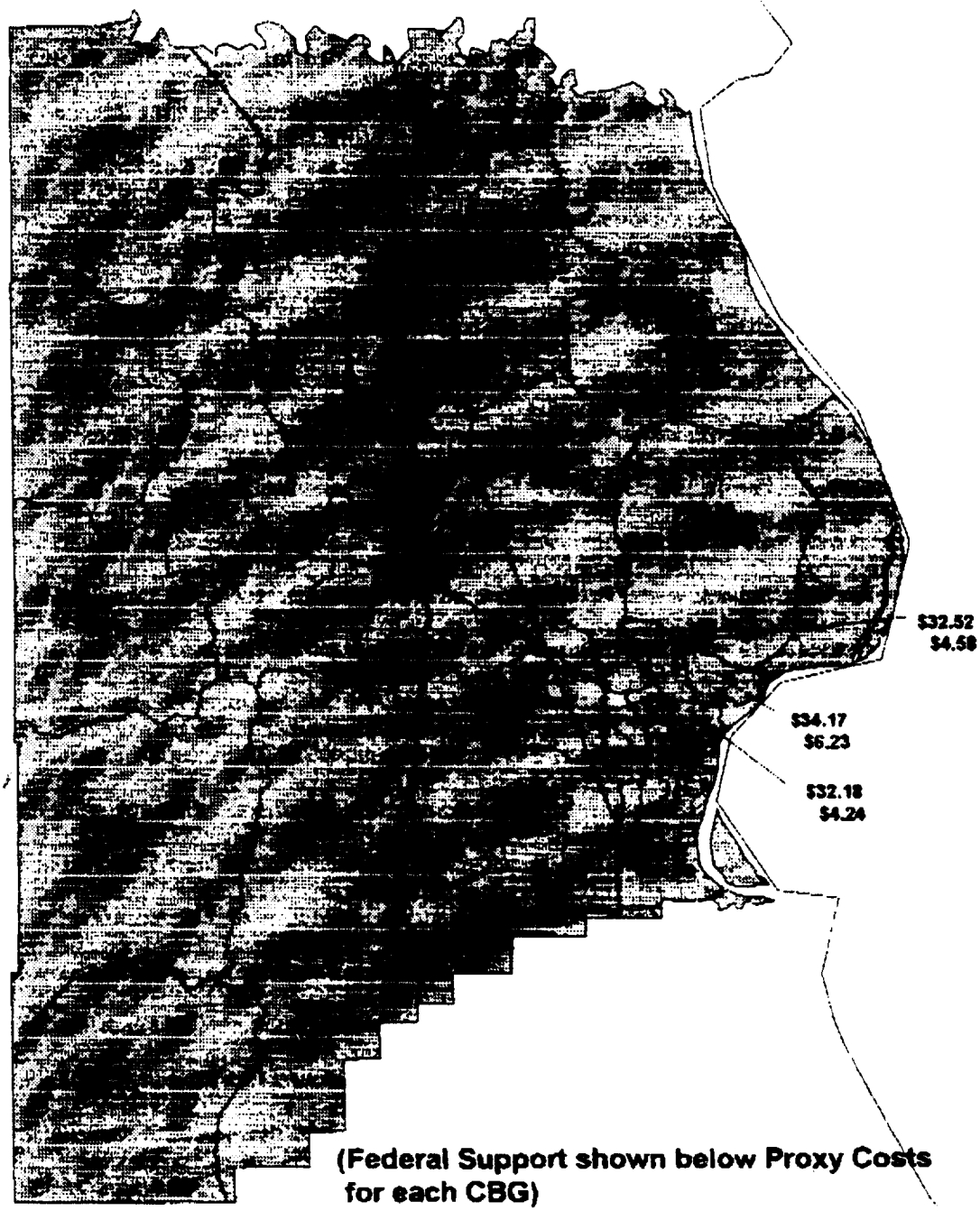
BellSouth - Florida Wire Centers



Census Block Groups Surrounding Jackson, Missouri



Jackson, MO CBGs with Proxy Costs and Federal Support Per Line



(Federal Support shown below Proxy Costs for each CBG)

If a Proxy Approach is Adopted, then a Proxy Model that Combines the Best of the CPM and the BCM2 is Needed:

- The best of the CPM and the BCM2 could be combined. For example, one approach would be:
  - » use BCM2 as base
  - » incorporate grid cells rather than CBGs
  - » map grid cells to actual serving wire center rather than closest wire center
  - » use economic depreciation lives
  - » other items to be determined

Education Fund

- The Kickstart Approach - Partial Classroom Model
  - » T-1 connection to schools with half the classrooms connected with networked computers (1 computer per 5 students)
  - » McKinsey & Co.

    Estimate:Average annual cost for telecommunications services: approximately $12,000/school

Education Fund

- BellSouth recommends a flexible discount (Funds-to-Schools, or "FTS") approach based on universal service funds determined by the KickStart Initiative
  - » Overall fund size based on one of the KickStart models (e.g., partial Classroom model)
  - » Maximum flexibility for schools
  - » Allocated fund dollars through a flexible discount (i.e., FTS) provides appropriate flexibility for schools to determine their individual needs and match funds to meet those unique needs
    - – In effect, schools determine the level of the discount for each service

Education Fund

- FTS fits legal definition of "discount" under the Act
  - » Section 254(h)(1)(B) addresses "rates less than the amounts charged for similar services to other parties" as the equivalent of the term "discount"
- FTS is not a "block grant"
  - » All schools receive their share of allocated funds
- FTS approach provides equity among schools
  - » Even unconnected schools can use their allocated funds as "start-up" to ensure connectivity
  - » FTS provides the equivalent of an "E" rate by schools applying allocated funds to achieve 100% discount for selected services.

Education Fund

- Example of services schools can obtain at 100% discount based on $1,000 per month FTS allocation
  - » 28 exchange lines
  - » 10 ISDN lines
  - » 1-2 Megalink (1.544 mbps) lines
  - » 7 Frame Relay lines

Education Fund

- Fund size must be reasonable and predictable
  - » FTS approach provides mechanism to gain predictability (as opposed to an open-ended discount approach).
  - » Kickstart model provides reasonable basis for fund size.
- Funds provided to K-12 schools and libraries can be used to purchase any telecommunications service designated as an eligible service by the Commission, as defined in the Act.

Education Fund

- Services eligible for discounts limited to telecommunications services as defined by the Act
  - » "Telecommunications" is defined as transmission between points (i.e., transport services)
- Non telecommunications services are excluded
  - » Inside wiring must be addressed outside the universal service fund

Education Fund

- Overall approach
  - » Flexible Discount arrangement (Funds-to-Schools)
    - – Establish fund size based on KickStart model
    - – Allocate fund dollars to schools
    - – Allocation can be modified to reflect income level, population density, etc.
    - – Schools can aggregate funds on school district or higher basis to further coordinate purchases (more market power)

Education Fund

- Schools may use fund dollars for any available telecommunications service included in definition (not just the services which were the basis for determining the size of the fund).
- Services purchased at tariff (or market) rates
- FTS approach incents providers to compete for school funds - drives prices toward market level

- Bona Fide service request process
  - » Minimizes uneconomic or untimely requests
  - » Allows coordination of requests as part of an overall education plan
  - » Most states in BellSouth region already have a statewide technology plan requiring either a district-based or school-based technology plan

Education Fund

- Funding
  - » Explicit funding required by Act
  - » Surcharge on customer bills for all providers of Interstate service
  - » Federal universal service support mechanism may cover Intrastate services

Education Fund

- Relation of interstate and intrastate mechanisms
  - » Section 254(c)(3) definition of services should not encompass an unlimited quantity of services or an unlimited amount of support.
  - » Amount of allotted federal universal service support available for each school under Section 254(h)(1)(B) would be determined by Commission for interstate services and by each state for intrastate services, with the maximum combined amount as determined by the Commission under Section 254(c)(3).
  - » Section 254(f) permits states to provide universal service support over and above the federal fund size, or to establish additional definitions and standards, as long as they are "specific," "predictable," and "sufficient" so as not to rely on or burden federal universal service support mechanisms.

Education Fund-Library

- Library Fund similar to Education
  - » Size determined by KickStart type calculation
  - » Allocate dollars on per library basis with variations to address rural, urban or low income distributions
  - » Flexible discount methodology provides customer flexibility to determine needs and level of discount for each service

Health Care

- Services to be provided in rural areas at rates reasonably comparable to urban rates
- Any difference to be credited toward contribution to universal service fund
- Recommend Transport of up to DS1 speeds as definition (also recommended by Commission's Telecommunications and Health Care Advisory Panel)

Key Concluding Points

- The Interstate universal service fund should replace the interstate CCL and USF for non-rural companies
- Universal service support should be based on fully distributed book costs
- Universal service support must be grounded in revenue neutrality upon implementation
- Over time, universal service support could be reduced through modest rate rebalancing
- An education fund, based on the Funds-to-Schools approach, should be implemented